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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/695,294 10/27/2003 David C. McClure 03-C-006 3951 7590 **EXAMINER** 06/23/2005 Lisa K. Jorgenson LAXTON, GARY L STMicroelectronics, Inc. **ART UNIT** PAPER NUMBER 1310 Electronics Drive Carrollton, TX 75006-5039 2838

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|--|-----------------------|-----------------------------|
| Office Action Summary | 10/695,294 | MCCLURE ET AL. |
| | Examiner | Art Unit |
| | Gary L. Laxton | 2838 |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | |
| Status | | |
| 1) Responsive to communication(s) filed on | _• | |
| 2a) ☐ This action is FINAL. 2b) ☑ This action is non-final. | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | |
| Disposition of Claims | | |
| 4)⊠ Claim(s) <u>1-27</u> is/are pending in the application. | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | |
| 5) Claim(s) is/are allowed. | | |
| 6)⊠ Claim(s) <u>1-8,10-18 and 20-27</u> is/are rejected. | | |
| 7)⊠ Claim(s) <u>9 and 19</u> is/are objected to. | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | |
| Application Papers | | |
| 9) The specification is objected to by the Examine | · · | |
| 10)⊠ The drawing(s) filed on <u>27 October 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | |
| Priority under 35 U.S.C. § 119 | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | |
| 1. Certified copies of the priority documents have been received. | | |
| 2. Certified copies of the priority documents have been received in Application No3. Copies of the certified copies of the priority documents have been received in this National Stage | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | |
| | · • | |
| Attachment/s) | | |
| Attachment(s) Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) |
| 2) Dotice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Da | ate |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | | atent Application (PTO-152) |
| S. Potent and Trademark Office | | |

DETAILED ACTION

Inventorship

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Specification

2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

3. Claims 1-11 are objected to because of the following informalities:

Claim 1 recites the limitation "a first supply voltage" in 10. There is insufficient antecedent basis for this limitation in the claim. Line 3 references "a first supply voltage" as well. Are these intended to be one and the same?

Claim 2 recites the limitation "the supply output" in 4. There is insufficient antecedent basis for this limitation in the claim. Line 3 of claim 2 recites "a supply output" and claim 1 line

4 recites "a supply output." Are these intended to be one and the same?

Claims 3-11 inherit the same through dependency.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-8, 10-18 and 20-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Danstrom et al (US 6,031,363).

Claims 1-8, 11-18, 20-22, 24, 25 and 27; Danstrom et al disclose a voltage regulator which has two regulation circuits and a comparator for controlling the two regulation circuits. The input of the comparator is connected to a power supply voltage such that the output of the comparator changes states when the power supply voltage reaches a predetermined voltage of around 8 volts. A first regulation circuit is enabled to provide the Vcc from a battery voltage until the power supply voltage reaches around 8 volts which is when the comparator changes states. At that point, the first regulation is disabled and a second regulation circuit is enabled to provide the Vcc voltage from the power supply voltage. Furthermore, Danstrom et al disclose a system, comprising: a first voltage regulator (Q18) having a supply input coupled supply voltage

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(Vin2), an enable input (pcomp2, M18) and supply output, the first voltage regulator selectively providing at the supply output up to a first predetermined current level at a regulated voltage based upon the first supply voltage when enabled and providing substantially no current when disabled; compare circuitry (figure 3) having an input coupled to the first supply voltage (Vin2) and an output coupled to the enable input (pcomp2) of the first voltage regulator and having a value indicative of whether the first supply than a predetermined voltage and voltage is greater than a predetermined voltage level; and circuitry having a supply input coupled to the supply output of the first voltage regulator (i.e. Vcc to load). A second voltage regulator having a supply input coupled to a second supply voltage (Vin1) when enabled and a supply output, the second voltage regulator selectively providing at the supply output thereof up to a second predetermined current level at a regulated voltage based upon the second supply voltage, the supply output of the first voltage regulator being coupled to the supply output of the second voltage regulator (figure 2).

Claims 10, 23 and 26; a transistor (17) having a first conduction terminal coupled to a battery (Vin1) a second conduction terminal coupled to the supply input of the circuitry (Vcc to load) and a control terminal coupled to the output of the compare circuitry (M17, pcomp1).

Allowable Subject Matter

6. Claim 9 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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7. The following is a statement of reasons for the indication of allowable subject matter:

Prior art fails to disclose or suggest, the limitations of claim 9 in combination with claim 7 and claim 1, including wherein the first voltage regulator further comprises a second transistor having a first conduction terminal coupled to the supply input of the first regulator, a control terminal coupled to the output of the compare circuitry and a second terminal coupled to the control terminal of the first transistor.

Prior art fails to disclose or suggest, the limitations of claim 19 in combination with claim 17 and claim 16, including wherein the first voltage regulator further comprises a second transistor having a first conduction terminal coupled to the supply input of the first regulator, a control terminal coupled to the output of the compare circuitry and a second terminal coupled to the control terminal of the first transistor.

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Any inquiry concerning this communication or earlier communications from the 8. examiner should be directed to Gary L. Laxton whose telephone number is (571) 272-2079. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571) 272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gary L. Laxton
Primary Examiner

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